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Extended Abstract

Identifying Identifying the Emotional, Cognitive, and Physical Components of Group Online Games in the Lives of Adolescents: A Thematic Analysis

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Introduction

As we enter the third millennium, new technologies are increasingly expanding. Technology has changed many aspects of human life in contemporary societies and has had significant effects on lifestyle, social communication, trade and commerce, education and learning, and even entertainment. Perhaps it is no longer possible to study human issues without considering the effects of technology.

In this regard, it should be noted that computer games represent a new generation of media that create subtle changes in mental skills and serve as one of the gateways for acquiring basic competencies needed for entering cyberspace. The connection of modern computer games to the global Internet, along with the widespread availability of high-speed Internet for most gamers, as well as the spread of the COVID-19 pandemic and the restrictions on gatherings in crowded places, have increased the demand for membership in and playing of interactive computer games based on multiplayer communication.

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Due to their breadth and complexity, computer games engage a wide range of emotional and cognitive variables, and, on the other hand, their physical effects on gamers can also be examined. Therefore, despite the growing spread and popularity of these media, tools, software, and hardware, this study seeks to identify and examine the emotional, cognitive, and physical components of online group computer games in the lives of adolescents, using a qualitative research design.

Methodology

The method of this research is qualitative, based on thematic analysis. The sampling was non-probability and purposive. The participants in this research were high school students who had experience playing online group games for more than 2 hours daily and had a minimum history of more than 2 years in these games. The data collection tool was a semi-structured interview. After collecting the data, the step-by-step process of thematic analysis by Braun and Clarke (2006) was used to analyze them.

In order to validate the collected information, after each interview, the written content was provided to the interviewee to confirm the accuracy of their perception. Also, to ensure the coding and naming of the themes and their correspondence with the research data, the descriptive field-finding method was used, and the findings were reviewed by five faculty members of Shahid Chamran University of Ahvaz who had a history of conducting research related to the subject of this study.

Findings

After coding, the initial codes were re-examined and compared again with each other and with the data, which resulted in the integration of some of the initial codes and the formation of basic themes. Accordingly, initial codes 1 to 11 formed the themes of "positive and constructive emotional effects," 12 to 24 "negative and destructive emotional effects," 25 to 30 "positive and constructive cognitive effects," 31 to 41 "negative and destructive cognitive effects," and 42 to 46 "negative and destructive physical effects." Among the basic themes, "negative and destructive emotional effects" (106), "positive and constructive emotional effects" (86), "negative and destructive cognitive effects" (84), "negative and destructive physical effects" (32), and "positive and constructive cognitive effects" (28) were the most frequent.

After reviewing and ensuring the consistency of the basic themes with the extracted codes, three organizing themes were identified and labeled as "emotional components," "cognitive components," and "physical components" by combining and integrating the basic themes. In addition to the organizing themes, the theme

of "emotional, cognitive, and physical components of online group computer games" was placed at the center of the theme network as an overarching theme.

Conclusion

The results of this study showed that emotional, cognitive, and physical components can be defined in terms of positive and constructive and negative and destructive effects around modern online group computer games, to which many gamers from all over the world dedicate part of their daily hours. Despite their enjoyable nature, these games also have aspects that can be harmful. During interviews with adolescent gamers, many themes were extracted regarding the emotions experienced and the desirable and undesirable effects of these emotions in online group games. Also, as the frequencies obtained from the themes indicate, emotional components are defined as an important category around online group computer games characterized by moment-to-moment tension. Part of these emotional dimensions of online computer games relates to the social connections formed in these games.

The results of the study by Kokko et al. (2018) in explaining the emotional complications involved in online computer games are consistent with the findings of this study. Also, the results of the present study in explaining the emotional components of online computer games, such as anger, aggression, hostility, and hatred, are consistent with the results of the study by Yao et al. (2019). In addition, the study by Pallavicini et al. (2022) examining the destructive emotional effects of online computer games during the COVID-19 pandemic is consistent with the findings of this study.

It should also be added that online computer games should be distinguished from regular computer games in terms of cognitive components. Unlike console or offline computer and television games, online games produce different cognitive effects by creating the ability to establish social connections around the game, which are mainly the foundation and structure of this style of games. Learning language, attitude, computer programming, and increased creativity due to being in different in-game communities are among the positive cognitive effects acknowledged by adolescent gamers. The results of Aliyari et al. (2019) study on improving cognitive abilities, as well as the results of Mursidin et al. (2022) study on progress in English language learning among gamers, are aligned with the findings of this study. It should also be noted that, according to the participants, the physical effects of online computer games are not positive or constructive due to their emotional and cognitive effects. The results of this study in explaining the physical effects of online computer games are consistent with the findings of Huard Pelletier (2020) and Khan Marwat (2023).

Finally, more quantitative and mixed studies are recommended to generalize these results. In addition, it is suggested that:

- The findings of relevant research should be explained to parents, teachers, educators, child and adolescent psychologists, and all those who deal with adolescents in schools and associations.
- Research should be designed to assess the feasibility of using group online computer games as an environment for scientific education.

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